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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,899

03/24/2004

Sang-Eun Nam

2060-3105

7413

35884

7590

07/31/2008

LEE, HONG, DEGERMAN, KANG & SCHMADEKA

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LOS ANGELES, CA 90017

EXAMINER

SAMS, MATTHEW C

ART UNIT

PAPER NUMBER

2617

MAIL DATE

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07/31/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,899	<b>Applicant(s)</b> NAM, SANG-EUN	
	<b>Examiner</b> MATTHEW SAMS	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 10-13, 16, 17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10-13, 16, 17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action has been changed in response to the amendment filed on 7/3/2008.
2. Claims 1, 11 and 17 have been amended. Claims 6 and 14 have been cancelled.
3. The 35 U.S.C. 112 second paragraph rejections to claims 1, 11 and 17 have been withdrawn.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4, 5 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Krautz et al. (US-4,334,341 hereinafter, Krautz) in view of Howald (US-6,014,793).

Regarding claim 1, Krautz teaches a locking mechanism (Figs. 1-4) comprising:

a plurality of spring loaded locking members (Fig. 1 [9]), each having a bias spring (Fig. 1 [10]) biasing the locking member is biased in a closed position; (obvious because the release (Fig. 3 ["Press" & 24]) separates both spring loaded locking members (Fig. 1 [9]) from the indentations (Fig. 1 [11]) in order for the lock (Fig. 1 [1]) to separate from tongue (Fig. 1 [2]))

a lock release device (Fig. 3 [25]) operatively coupled to the plurality of locking members (Fig. 3 [9, 12 & 13]) to simultaneously move the plurality of locking members wherein each of the plurality of locking members moves laterally in a substantially different direction (Col. 2 lines 30-58 and Figs. 1-3 *i.e.* the locking members move towards the top and bottom of the page), wherein the lock release device moves orthogonally to each of the plurality of locking members; (Fig. 3 *i.e.* the lock release device moves perpendicularly to the locking members by moving towards the left and right edges of the page) and

a plurality of latching members (Fig. 1 [11]) being securely gripped by the plurality of locking members (Fig. 1 [9]), wherein the lock release device (Fig. 3 [24 & 25]) is in partial frictional contact with the plurality of locking members under the spring bias of each of the locking members, (Figs. 1-3 and Col. 2 lines 30-58) and

wherein each of the plurality of latching members is released from the grip of the corresponding locking member when the lock release device is forced in frictional sliding contact with the plurality of locking members against the spring bias of each of the locking members. (Col. 2 lines 54-58)

Krautz differs from the claimed invention by not explicitly reciting the spring loaded locking members each having a bias spring. However, it is obvious to one of ordinary skill in the art that the spring (Fig. 1 [10]) is securely attached to the lock (Fig. 1 [1]) and that both spring arms function independently from each other as two separate bias springs. Therefore, it is obvious to one of ordinary skill in the art that the spring

(Fig. 1 [10]) within Krautz functions as two bias springs and could be replaced by two bias springs which function identically to Fig. 1 [10].

Krautz differs from the claimed invention by not explicitly reciting the lock release device is biased in the closed position by a longitudinal elastic member.

In an analogous art, Howald teaches a lock release device (Fig. 5 [10]) is biased in the closed position by a longitudinal elastic member. (Fig. 5 [11] and Col. 3 line 51 through Col. 4 line 36) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the locking mechanism of Krautz after modifying it to incorporate the spring for keeping the lock release device biased in a closed position of Howald since providing the spring bias of Howald (Fig. 5 [11]) to the lock release device of Krautz helps maintain a repeatable movement and also a redundant force upon the lock release (because spring [10] is squeezing components [9, 12 & 13] together and forcing the lock release [25] to the right) closer to the original specification/operation for a longer period of time.

Regarding claim 4, Krautz in view of Howald teaches the lock release device (Krautz Fig. 3 [24 & 25]) includes a first surface adapted to match the curvature of a corresponding second surface on each locking member. (Krautz Fig. 3 [9 & 24])

Regarding claim 5, Krautz in view of Howald teaches each of the first and second surfaces has an included configuration. (Krautz Fig. 3 [9 & 24])

Regarding claim 10, Krautz in view of Howald teaches the first and second inclined surfaces are in frictional sliding contact when the lock release device is forced

to move orthogonally to each of the plurality of locking members. (Krautz Fig. 1-3 and Col. 1 line 62 through Col. 2 line 58)

6. Claims 2, 3, 11-13, 16, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krautz in view of Howald as applied to claim 1 above, and further in view of Latella et al. (US-5,738,954 hereinafter, Latella).

Regarding claim 2, Krautz in view of Howald teaches the limitations of claim 1 above, but differs from the claimed invention by not explicitly reciting the latching members and the plurality of locking members are used to removably lock a battery cover to the main body of a mobile telephone set.

In an analogous art, Latella teaches battery cover for a mobile telephone set (Fig. 2 [100 & 102]) that is attached by sliding (Fig. 16 [1601]) the battery cover (Fig. 16 [102]) onto the mobile telephone set (Fig. 16 [100]) and includes latching members (Fig. 4 [404]) and a plurality of locking members. (Fig. 4 [406], Col. 4 line 54 through Col. 5 line 11, Fig. 8 and Fig. 9) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Krautz in view of Howald after modifying it to secure the battery cover of Latella. One of ordinary skill in the art would have been motivated to do this since it provides a secure locking mechanism which is inexpensive and reliable. (Krautz Col. 1 lines 38-46)

Regarding claim 3, Krautz in view of Howald and Latella teaches each of the locking members include at least one locking leg (Krautz Fig. 3 [9]) adapted to grip the corresponding latching member (Krautz Fig. 1 [11]) to secure the battery cover to the main telephone body. (Latella Fig. 2 [100 & 102])

Regarding claim 11, Krautz teaches a locking mechanism (Figs. 1-4) comprising:

a first and second locking member; (Fig. 1 [9] *i.e.* second locking member not labeled, but shown in Fig. 1)

a first and a second bias spring biasing the first and the second locking members, respectively, in a closed position; (Fig. 1 [10])

a lock release device (Fig. 3 [25]) operatively coupled to the first and second locking members (Fig. 3 [9, 12 & 13]) to simultaneously move the first locking member in a first direction (towards the top of the page) against the first bias spring and the second locking member in a second direction (towards the bottom of the page) against the second bias spring wherein the first and second direction are different (Col. 2 lines 30-58), and wherein the lock release devices moves in a third direction that is orthogonal to each of the first and second locking members; (Col. 2 lines 30-58 and Figs. 1-3 *i.e.* the lock release device moves perpendicularly to the locking members by moving towards the left and right edges of the page while the locking members move towards the top and bottom of the page) and

a first and second latching member (Fig. 1 [11]) being securely gripped by the first and second locking members (Fig. 1 [9]), wherein the lock release device (Fig. 3 [24 & 25]) is in partial frictional contact with the first and second locking members, (Figs. 1-3 and Col. 2 lines 30-58)

wherein the first and the second latching members are each released from the grip of the corresponding locking member when the lock release device is forced in

frictional sliding contact with the first and second locking members against the corresponding bias spring of each of the locking members. (Col. 2 lines 54-58)

Krautz differs from the claimed invention by not explicitly reciting the spring loaded locking members each having a bias spring. However, it is obvious to one of ordinary skill in the art that the spring (Fig. 1 [10]) is securely attached to the lock (Fig. 1 [1]) and that both spring arms function independently from each other as two separate bias springs, moving in opposite directions against their spring bias (towards the top of the page and towards the bottom of the page). Therefore, it is obvious to one of ordinary skill in the art that the spring (Fig. 1 [10]) within Krautz functions as two bias springs and could be replaced by two bias springs which function identically to Fig. 1 [10].

Krautz differs from the claimed invention by not explicitly reciting the lock release device is biased in the closed position by a longitudinal elastic member.

In an analogous art, Howald teaches a lock release device (Fig. 5 [10]) is biased in the closed position by a longitudinal elastic member. (Fig. 5 [11] and Col. 3 line 51 through Col. 4 line 36) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the locking mechanism of Krautz after modifying it to incorporate the spring for keeping the lock release device biased in a closed position of Howald since providing the spring bias of Howald (Fig. 5 [11]) to the lock release device of Krautz helps maintain a repeatable movement and also a redundant force upon the lock release (because spring [10] is squeezing components



[9, 12 & 13] together and forcing the lock release [25] to the right) closer to the original specification/operation for a longer period of time.

Krautz in view of Howald differs from the claimed invention by not explicitly reciting the latching members and the plurality of locking members are used to removably lock a battery cover to the main body of a mobile telephone set.

In an analogous art, Latella teaches battery cover for a mobile telephone set (Fig. 2 [100 & 102]) that is attached by sliding (Fig. 16 [1601]) the battery cover (Fig. 16 [102]) onto the mobile telephone set (Fig. 16 [100]) and includes latching members (Fig. 4 [404]) and a plurality of locking members. (Fig. 4 [406], Col. 4 line 54 through Col. 5 line 11, Fig. 8 and Fig. 9) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Krautz in view of Howald after modifying it to secure the battery cover of Latella. One of ordinary skill in the art would have been motivated to do this since it provides a secure locking mechanism which is inexpensive and reliable. (Krautz Col. 1 lines 38-46)

Regarding claim 12, Krautz in view of Howald and Latella teaches the lock release device (Krautz Fig. 3 [24 & 25]) includes a first surface adapted to match the curvature of a corresponding second surface on each locking member. (Krautz Fig. 3 [9 & 24])

Regarding claim 13, Krautz in view of Howald and Latella teaches each of the first and second surfaces has an included configuration. (Krautz Fig. 3 [9 & 24])

Regarding claim 16, Krautz in view of Howald and Latella teaches the lock release device (Krautz Fig. 3 [24 & 25]) is adapted to move in the third direction against its spring bias. (Krautz Fig. 3 [arrow])

Regarding claim 17, Krautz in view of Howald and Latella teaches the third direction is perpendicular to a rear surface of the mobile terminal's body. (Krautz Fig. 1-3 *i.e.* Release moves in the direction of the arrow (Krautz Fig. 3) and the releases separate towards the top and bottom of the page and Latella Fig. 2 *i.e.* surface of the elevating portion created because part [202] is raised)

Regarding claim 19, Krautz in view of Howald and Latella teaches the first and second inclined surfaces are in frictional sliding contact when the lock release device is forced to move in the third direction. (Krautz Fig. 1-3 and Col. 2 lines 24-58)

Regarding claim 20, Krautz in view of Howald and Latella teaches each of the locking members include at least one locking leg (Krautz Fig. 3 [9]) adapted to grip the corresponding latching member (Krautz Fig. 1 [11]) to secure the battery cover to the main telephone body. (Latella Fig. 2 [100 & 102])

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1 and 11 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW SAMS whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/

Supervisory Patent Examiner, Art Unit 2617

MCS

7/24/2008